

From moment polytope to multidegree and back again: Examples

Goal 1. We can get a MV polytope from a hilbert series (in fact from much less the multidegree). Can we get a hilbert series from a MV polytope? If we decorate the edges sufficiently? Whatever that means.

This is hard. The recursive nature of a moment polytope: it is at once a path in a crystal and an element in a crystal—the endpoint of the path. That’s just the recursive nature of a tree, of which a crystal is an instance: a node is a branch (path) is a node.